

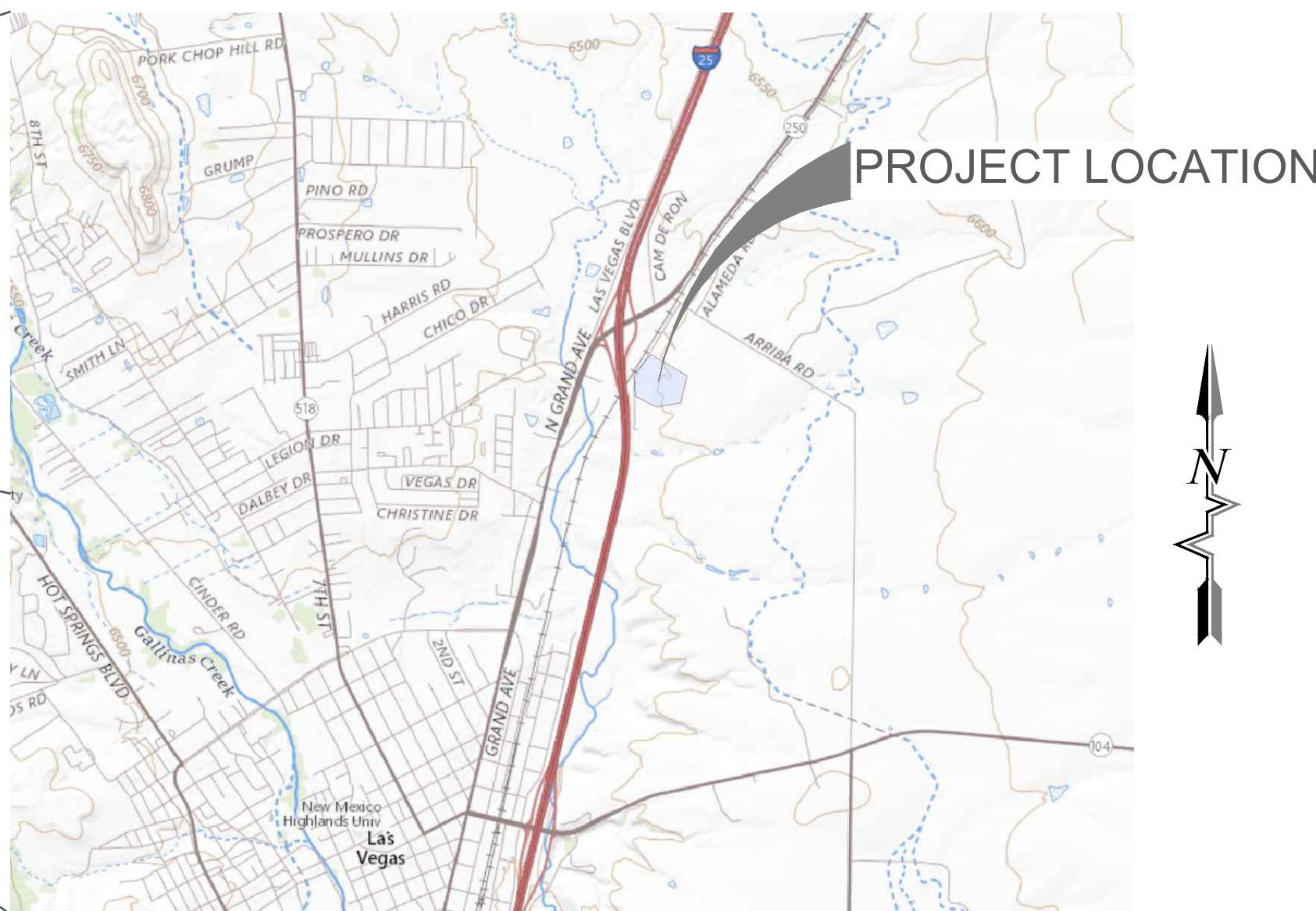
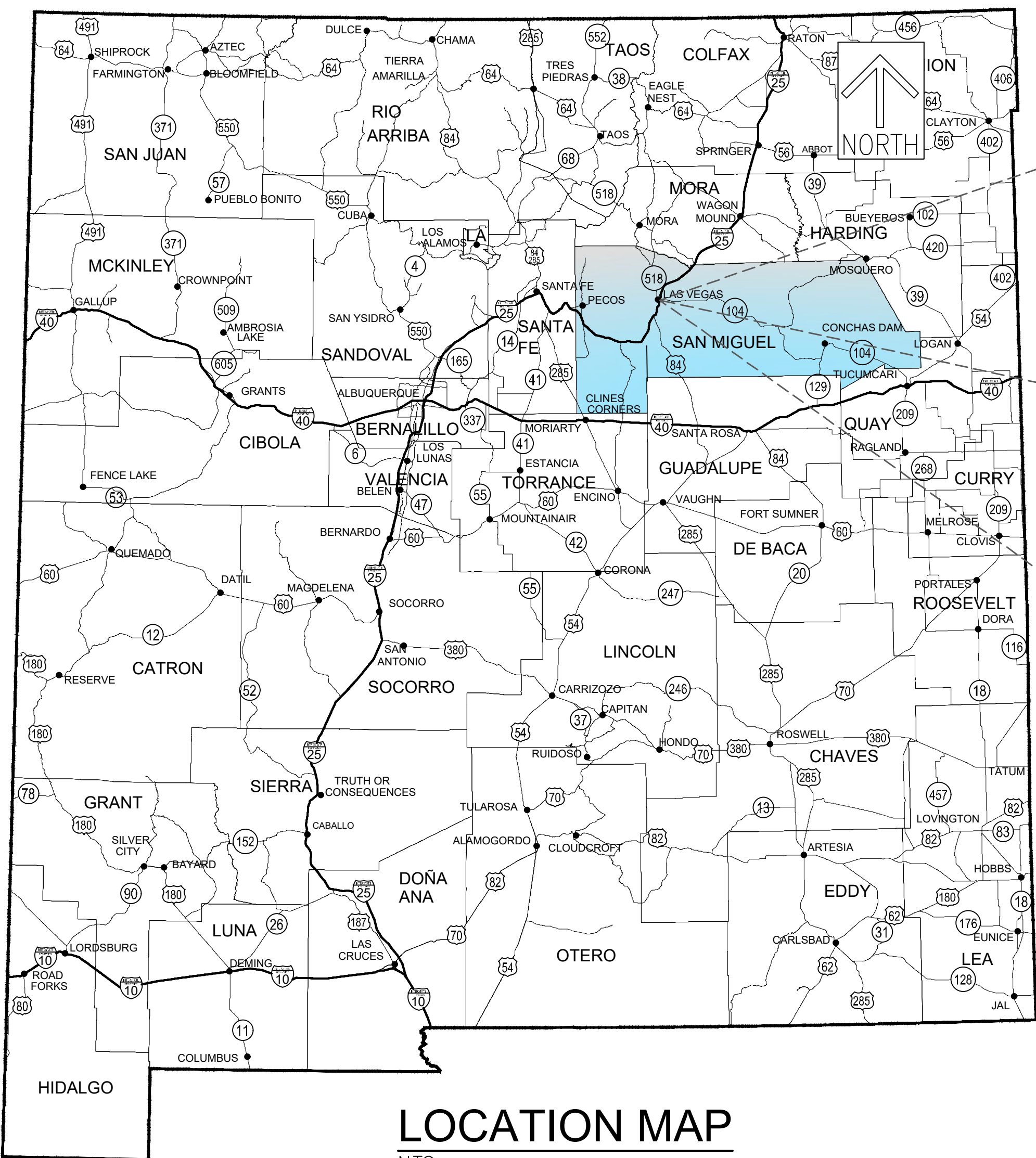
LAS VEGAS SOLID WASTE FACILITY

TRANSFER STATION DRAINAGE PROJECT

SAN MIGUEL COUNTY, LAS VEGAS, NEW MEXICO

March 2022

PROJECT DESCRIPTION:
GRADING, DRAINAGE, PAVING AND PARKING IMPROVEMENTS



SHEET INDEX

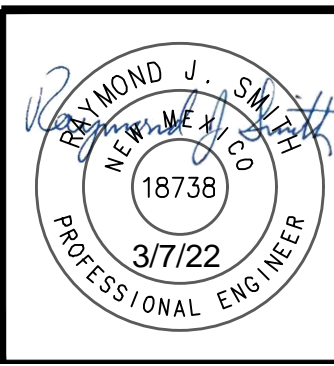
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THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION ON BEHALF OF SOUDER, MILLER & ASSOCIATES.

Raymond J. Smith
RAYMOND J. SMITH, P.E.
PROJECT MANAGER

3/7/22
DATE

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Rev #	Date	Description	By	Chk'd



SOUDER, MILLER & ASSOCIATES
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Cortez, Grand Junction, Lakewood, CO - Safford, AZ - El Paso, TX

1. SOUDER, MILLER AND ASSOCIATES SHALL HEREINAFTER BE KNOWN AS THE ENGINEER. CONTRACTOR SHALL SUBMIT ALL QUESTIONS TO ENGINEER'S REPRESENTATIVE.
2. THERE WILL BE A PERSON OR PERSONS (HEREINAFTER KNOWN AS THE OWNER'S REPRESENTATIVE) CHOSEN BY OWNER (HEREINAFTER KNOWN AS THE OWNER) TO ACT AS A CONTACT PERSON BETWEEN THE OWNER AND THE ENGINEER. THE OWNER'S REPRESENTATIVE WILL OBSERVE AND PROVIDE INFORMATION, AND PROVIDE CRITICAL LOCATIONS THROUGH THE ENGINEER TO THE CONTRACTOR IN THE FIELD.
3. THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS THAT MAY ARISE FROM THE CONTRACTOR'S FAILURE TO FOLLOW THESE DRAWINGS, SPECIFICATIONS, AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS ARISING FROM FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS.
4. CONTRACTOR SHALL CONFINE ALL CONSTRUCTION OPERATIONS TO THE LIMITS OF THE PROJECT EASEMENTS DEFINED IN THESE DRAWINGS, AND IN NO WAY ENCR OACH ONTO ADJACENT PROPERTIES, UNLESS LEGAL EASEMENTS ARE PROVIDED. CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR ANY AGREEMENTS NEEDED, OR DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING UTILITIES.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTING THE PROJECT ACCORDING TO CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (NMSSWPCC) APWA SPECS AND STANDARDS, INCLUDING WHERE PARTICULAR WORK ITEMS ARE NOT SPECIFIED HEREIN.
6. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AS SET FORTH IN THE TECHNICAL SPECIFICATIONS AND CONTRACT DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE ENGINEER REGARDING ANY QUESTION ARISING FROM ANY ASPECT OF THIS PROJECT NOT SPECIFICALLY COVERED IN THE PLANS AND TECHNICAL SPECIFICATIONS, OR ANY CHANGES OR CORRECTIONS TO THE PLANS AND SPECS.
7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY, WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL (OSHA), STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P - EXCAVATIONS.
8. CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING BUILDING PERMITS, ROAD CROSSING PERMITS AND ANY OTHER PERMITS, WHICH HAVE NOT ALREADY BEEN OBTAINED BY THE OWNER OR ENGINEER.
9. THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS TO ANY LOCAL BUSINESSES AND RESIDENTS AS REQUIRED FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE OF AND SCHEDULE ACCESS CLOSURES AT LEAST 24 HOURS IN ADVANCE WITH PROPERTY OWNERS AND THE ENGINEER.
10. CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH SPECIFICATIONS FOR ROAD AND ANY APPLICABLE SPECIAL PROVISION AND/OR SUPPLEMENTAL SPECIFICATION, AS WELL AS THE MOST CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, UNLESS OTHERWISE SPECIFIED HEREIN.
11. AS PART OF THE TRAFFIC CONTROL PLAN AND TRAFFIC CONTROL MANAGEMENT, THE CONTRACTOR SHALL HAVE PERSONNEL AVAILABLE 24 HOURS PER DAY, 7 DAYS PER WEEK, TO INSPECT AND MAINTAIN DETOURS AND TRAFFIC CONTROL DEVICES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED BY THE PLANS WHETHER SPECIFICALLY LISTED OR NOT TO COMPLETE THE PROJECT. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND THE CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR UNLISTED REMOVALS.
13. OBSTRUCTIONS REMOVED FROM THE WORK AREAS SHALL BE DISPOSED OF BY THE CONTRACTOR. DISPOSAL OF USABLE MATERIALS (E.G. EXCESS DIRT, GRAVEL, ETC.) SHALL BE AT A SITE DESIGNATED BY THE OWNER DURING CONSTRUCTION. ALL OTHER WASTE SHALL BE DISPOSED OF AT AN APPROVED LANDFILL. ALL DISPOSAL SITES MUST BE APPROVED BY THE ENGINEER AND OWNER PRIOR TO DISPOSAL OF ANY WASTE.
14. THE CONTRACTOR SHALL SALVAGE ANY OBSTRUCTIONS NOTED ON THE CONTRACT DRAWINGS AS WELL AS REUSABLE ITEMS FOUND DURING CONSTRUCTION. SUCH ITEMS, IF ANY, SHALL BE DELIVERED TO THE PROPERTY OWNER AS DIRECTED BY THE ENGINEER AND/OR OWNER DURING CONSTRUCTION.
15. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AN EQUIPMENT STORAGE YARD. THE LOCATION OF THE YARD MUST BE APPROVED BY THE OWNER. NO DIRECT PAYMENT WILL BE MADE FOR THE YARD. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SITE SECURITY.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER SOURCE FOR CONSTRUCTION UNLESS OTHERWISE PROVIDED. NO DIRECT PAYMENT WILL BE MADE FOR WATER. ALL PERMITS, FEES, EQUIPMENT, HAUL, ETC. RELATIVE TO OBTAINING WATER SHALL BE CONSIDERED INCIDENTAL.
17. THE CONTRACTOR SHALL TAKE ANY NECESSARY MEASURES TO PROTECT HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENTS FROM DAMAGE DURING CONSTRUCTION. IF DURING EXECUTION OF THE PROJECT, THE CONTRACTOR'S ACTIVITIES DISTURB OR DESTROY SUCH MONUMENTS, THE CONTRACTOR SHALL RE-ESTABLISH THEM IN ACCORDANCE WITH ESTABLISHED STANDARDS AND PROCEDURES.
18. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING STRUCTURES FREE OF DUST AND/OR CONSTRUCTION DEBRIS AT ALL TIMES DURING THE EXECUTION OF THE PROJECT. ALL EXISTING AND NEW STRUCTURES SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ALL COSTS RELATED TO THIS ITEM SHALL BE INCIDENTAL TO THE WORK AND NO EXTRA PAYMENT SHALL BE MADE TO THE CONTRACTOR.
19. CONTRACTOR SHALL REPAIR ANY EXISTING STRUCTURE OR UTILITY DAMAGED DURING THE EXECUTION OF THE PROJECT, AT NO ADDITIONAL COSTS TO THE OWNER.
20. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF MATERIALS AND EQUIPMENT PRIOR TO AND AFTER THEIR INSTALLATION AS APPLICABLE, UNTIL THE PROJECT'S FINAL ACCEPTANCE BY THE OWNER.
21. THE CONTRACTOR SHALL PREPARE AND MAINTAIN UP-TO-DATE "AS-BUILT" DRAWINGS AS PER THE CONTRACT DOCUMENTS. UPDATING SUCH DRAWINGS SHALL BE DONE NOT LESS THAN ONCE EVERY WEEK. THE OWNER AND ENGINEER'S PROJECT REPRESENTATIVES SHALL BE ALLOWED TO REVIEW THESE DRAWINGS AT ANY TIME DURING CONSTRUCTION. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER COMPLETE AS-BUILT DRAWINGS AS PER CONTRACT DOCUMENTS. TWO SETS OF "AS-BUILT DRAWINGS" WILL BE SUBMITTED, UNLESS NOTED OTHERWISE IN CONTRACT DOCUMENTS. ANY EXISTING UTILITIES NOT SHOWN IN THESE DRAWINGS SHALL BE LOCATED AND SHOWN IN AS-BUILT DRAWINGS.
22. CONTRACTOR SHALL SUBMIT ASTM OR AASHTO CERTIFICATES OF MATERIAL'S COMPLIANCE TO THE OWNER'S PROJECT REPRESENTATIVE, NO LESS THAN 5 DAYS PRIOR TO INITIATING ANY WORK INVOLVING SUCH MATERIALS.
23. ANY EXCEPTIONS TO PLACEMENT OR DEPTH OF MATERIALS AND EQUIPMENT MUST BE AUTHORIZED BY THE ENGINEER.
24. TESTING SHALL BE PERFORMED BY THE CONTRACTOR AS PER CONTRACT DOCUMENTS.

- P:\4-Las Vegas Solid Waste Facilities Improvements (4426216)\Task 5 Transfer Station Drainage Design\CAD\Civil\4426216 COVER.dwg, 3/4/2022 9:22:54 AM SAT

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	BID LOT 1 DRAINAGE		BID LOT 2 PAVING		PROJECT TOTAL	
			ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL
4.01	CONSTRUCTION STAKING, COMPLETE	L.S.	1		0		1	
6.05	MOBILIZATION, COMPLETE	L.S.	1		0		1	
201.01	SITE CLEARING AND GRUBBING, COMPLETE	ACRE	8.1		0		8.1	
201.06	EROSION CONTROL, INCL. ALL LABOR, EQUIP & MATERIALS, CIP	L.S.	1		0		1	
204.01	FILL CONSTRUCTION, INCL EXCAVATION, PLACEMENT & COMPACTION OF UNCLASSIFIED MATERIAL, CIP	CU.YD.	195		0		195	
301.02	SUBGRADE PREP, 12" AT 95% COMPACTION, CIP	SQ.YD.	16561		0		16561	
302.01	AGGREGATE BASE COURSE, CRUSHED, 6" AT 95% COMPACTION CIP	SQ.YD.	16561		0		16561	
336.022	ASPHALT CONCRETE, 2 INCH THICK SUPERPAVE SP-IV	SQ.YD.	0		33122		33122	
336.12	TACK COAT, CATIONIC EMULSIFIED ASPHALT, CIP	SQ.YD.	0		16561		16561	
343.01	EXISTING PAVEMENT, ASPHALT CONCRETE, REMOVE & DISPOSE, SAWCUT NOT REQUIRED, ANY THICKNESS, INCLUDING HAUL, COMPLETE.	SQ.YD.	16561		0		16561	
401.01	GUARDRAIL WITH POSTS, METAL BEAM, EXCEPT END ANCHORS, CIP	LF	287.5		0		287.5	
401.02	GUARDRAIL END ANCHOR, CIP	EACH	2		0		2.0	
440.001	REFLECTORIZED PAINTED MARKINGS, 4" WIDTH, CIP	LF	0		1800		1800	
440.01	REFLECTORIZED PAINTED MARKING, HANDICAP SYMBOL	EACH	0		5		5	
603.03	PLAIN RIPRAP, CIP	CU.YD.	348		0		348	
701.1	TRENCHING BACKFILL AND COMPACTION FOR 18" TO 36" SEWER PIPE, UP TO 8' IN DEPTH, PIPE NOT INCLUDED, COMPLETE.	LF	175		0		175	
910.103	DRAINLINE REMOVAL, 10" TO 18", EXCLUDING TRENCHING, COMPLETE	LF	240		0		240	
910.0X	18" STORM PIPE END SECTION, CIP	EACH	4		0		4	
912.01	HIGH PERFORMANCE STORM PIPE, FURNISH AND PLACE IN OPEN TRENCH, CIP	LF	175		0		175	
1011.01	SEEDING, CLASS A, NATIVE, CIP	ACRE	8.1		0		8	

RELOCATION OF EXISTING LIGHT POLE SHALL BE CONSIDERED INCIDENTAL TO COMPLETION OF PROJECT
SHEET C-13

Rev #
Date

Description

By
CHK'd

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CITY OF LAS VEGAS

LAS VEGAS

TRANSFER STATION DRAINAGE DESIGN

LAS VEGAS, NEW MEXICO

SUMMARY OF QUANTITIES

RAYMOND J. SOUTER

18738

3/7/22

PROFESSIONAL ENGINEER

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Designed
CSD

Drawn
BPN

Checked
GHE

Date: March 2022

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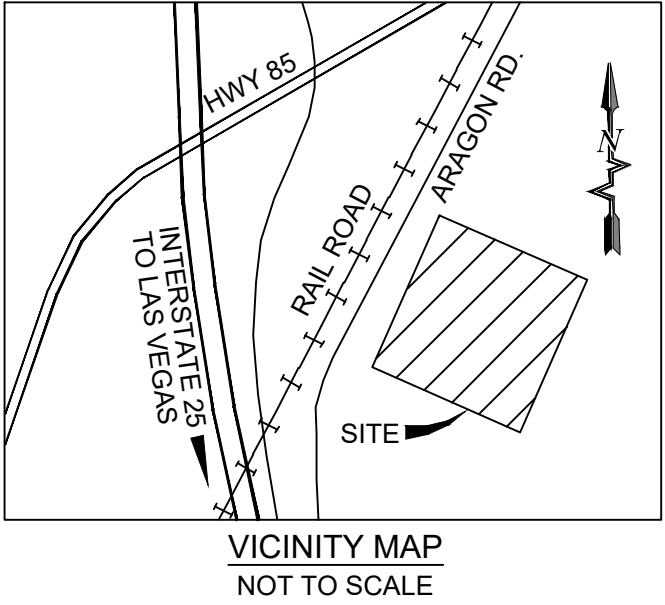
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TRANSFER STATION DRAINAGE DESIGN
LAS VEGAS, NEW MEXICO
SURVEY CONTROL SHEET

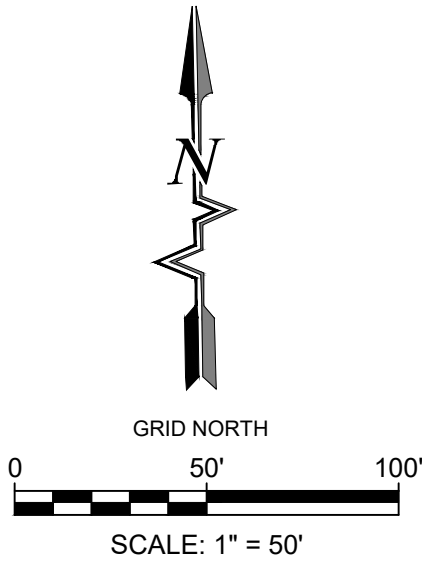


PROJECT COORDINATE SYSTEM INFORMATION:
REFERENCE FRAME: NAD 1983 (2011) (EPOCH 2010.000)
U.S. STATE PLANE NEW MEXICO CENTRAL ZONE (3002)
GRID TO GROUND SCALE FACTOR = 1.0002962349
SCALED FROM: N35°37'18.03464", W105°12'06.30162"
(N = 1683218.22, E = 1951950.25)
ELEVATION USED FOR SCALE: 6485.90'
CONVERGENCE: - 0° 30' 20.9484"
ALL DISTANCES ARE GROUND DISTANCES, UNITS ARE U.S. SURVEY FEET.

VERTICAL DATUM:
NAVD 1988
GEOID 12A (CONUS) WAS UTILIZED TO ESTABLISH ORTHO HEIGHTS

METHODS:
ORIGINAL CONTROL ON THIS PROJECT WAS OBSERVED AND SET ON OCTOBER 8, 2020 WITH FINAL ADJUSTMENTS MADE BY OCTOBER 19, 2020. ALL POINTS WERE OBSERVED USING TRIMBLE S5 TOTAL STATION AND TRIMBLE R8 GPS RECEIVERS UTILIZING RTK GPS METHODS.

SURVEY CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	1683218.22	1951950.25	6485.90	SET REBAR WITH CAP STAMPED SMA CONTROL
103	1682886.74	1952169.98	6494.52	SET 60D NAIL
107	1683152.36	1952534.92	6503.47	SET REBAR WITH CAP STAMPED SMA CONTROL



CERTIFICATION:

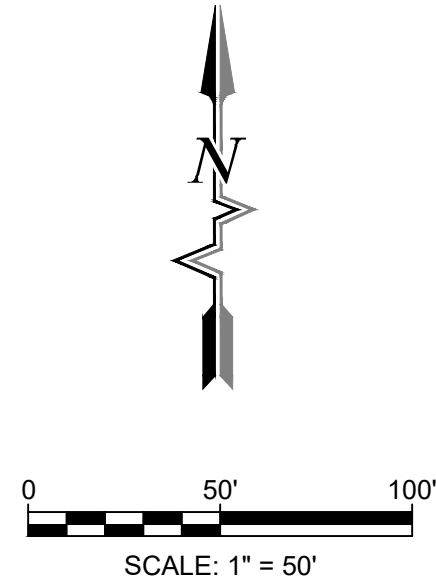
I, ALLEN C. GRACE, NEW MEXICO PROFESSIONAL SURVEYOR NO. 12443, DO HEREBY CERTIFY THAT THIS CONTROL SURVEY REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION BASED ON AN ACTUAL SURVEY ON THE GROUND AS DESCRIBED HEREIN; THAT I AM RESPONSIBLE FOR THIS SURVEY; AND THAT THE SURVEY AND REPORT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

Allen C. Grace
ALLEN C. GRACE, N.M.P.S. 12443



John E. 2021
DATE

CITY OF LAS VEGAS	LAS VEGAS	TRANSFER STATION DRAINAGE DESIGN LAS VEGAS, NEW MEXICO SURVEY CONTROL SHEET	SMA Engineering • Environmental • Surveying Serving the Southwest & Rocky Mountains 5454 Yence Avenue NE, Suite D Albuquerque, NM 87113 Phone (505) 299-0942 Toll Free (877) 299-0942 Fax (505) 293-3450 www.soudermiller.com	Rev #	Date	Description	By	CHKD
Designed			Drawn	Checked				
Date:			March 2022					
Scale:			Horiz: 1" = 50'					
Project No:								
Sheet:			C-1					



To Request a Line Locate Dial 811

New Mexico state law requires everyone involved in any excavation to provide at least two working days' notice to owners of underground facilities when a dig is planned. All facility owners are then required to mark the locations of any underground lines or take other appropriate measures to protect them.

Rev #	Date	Description	By

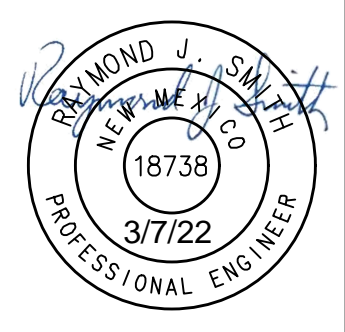
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CITY OF LAS VEGAS

LAS VEGAS

TRANSFER STATION DRAINAGE DESIGN
LAS VEGAS, NEW MEXICO
EXISTING SITE PLAN



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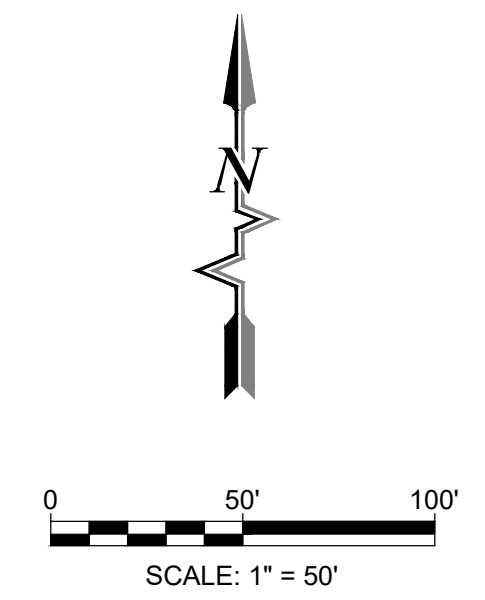
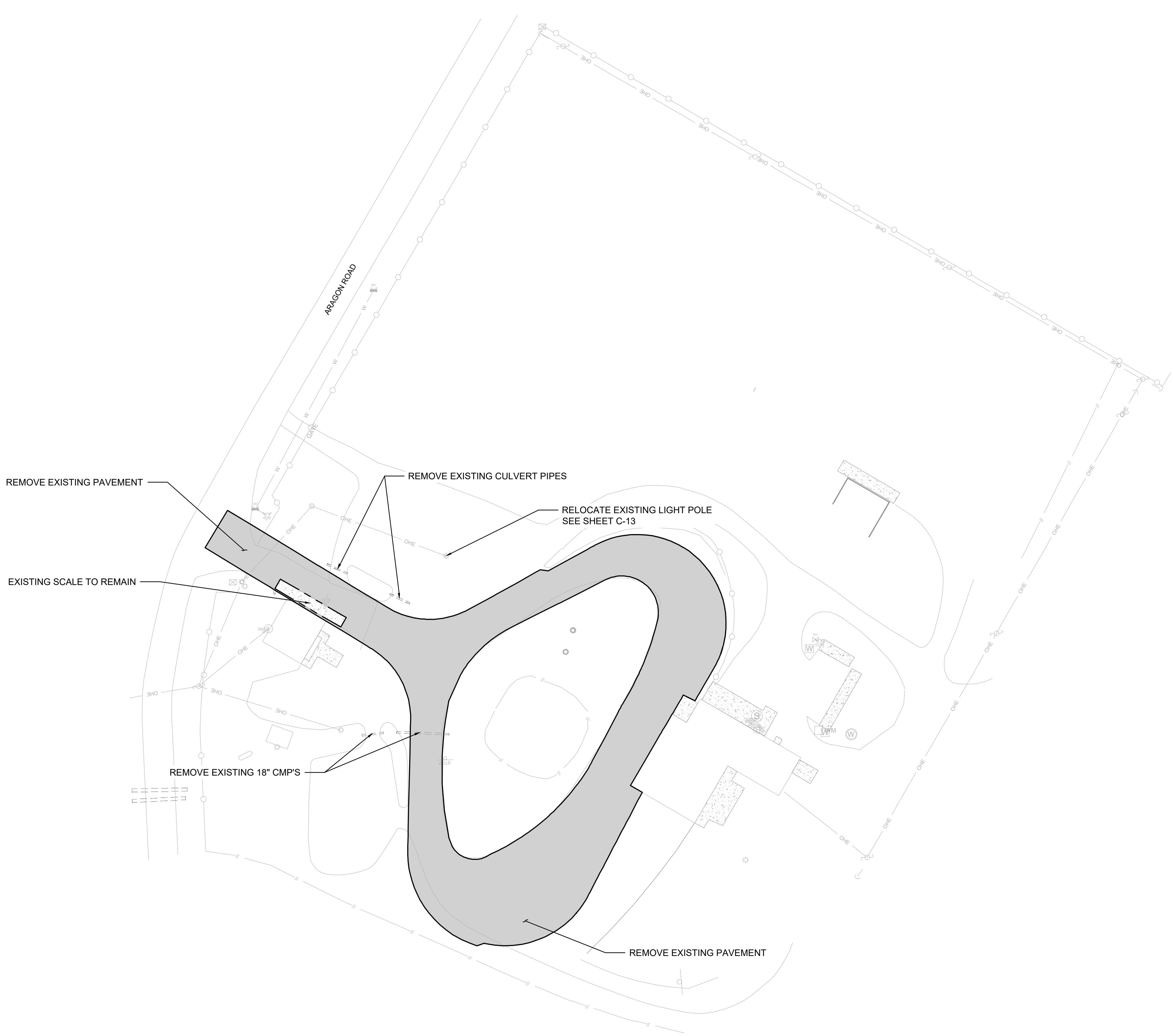
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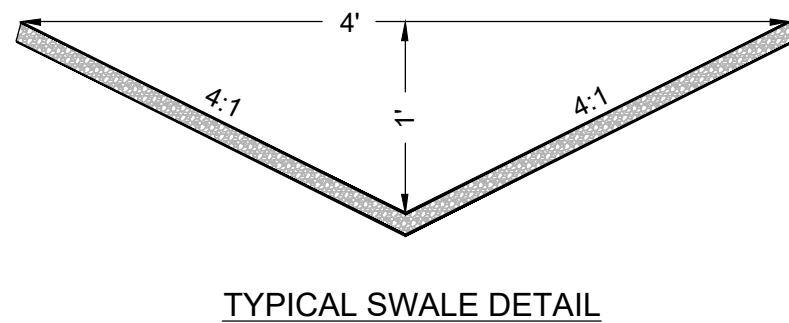
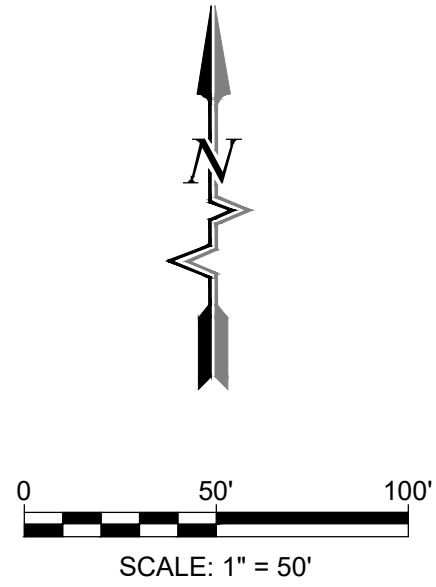
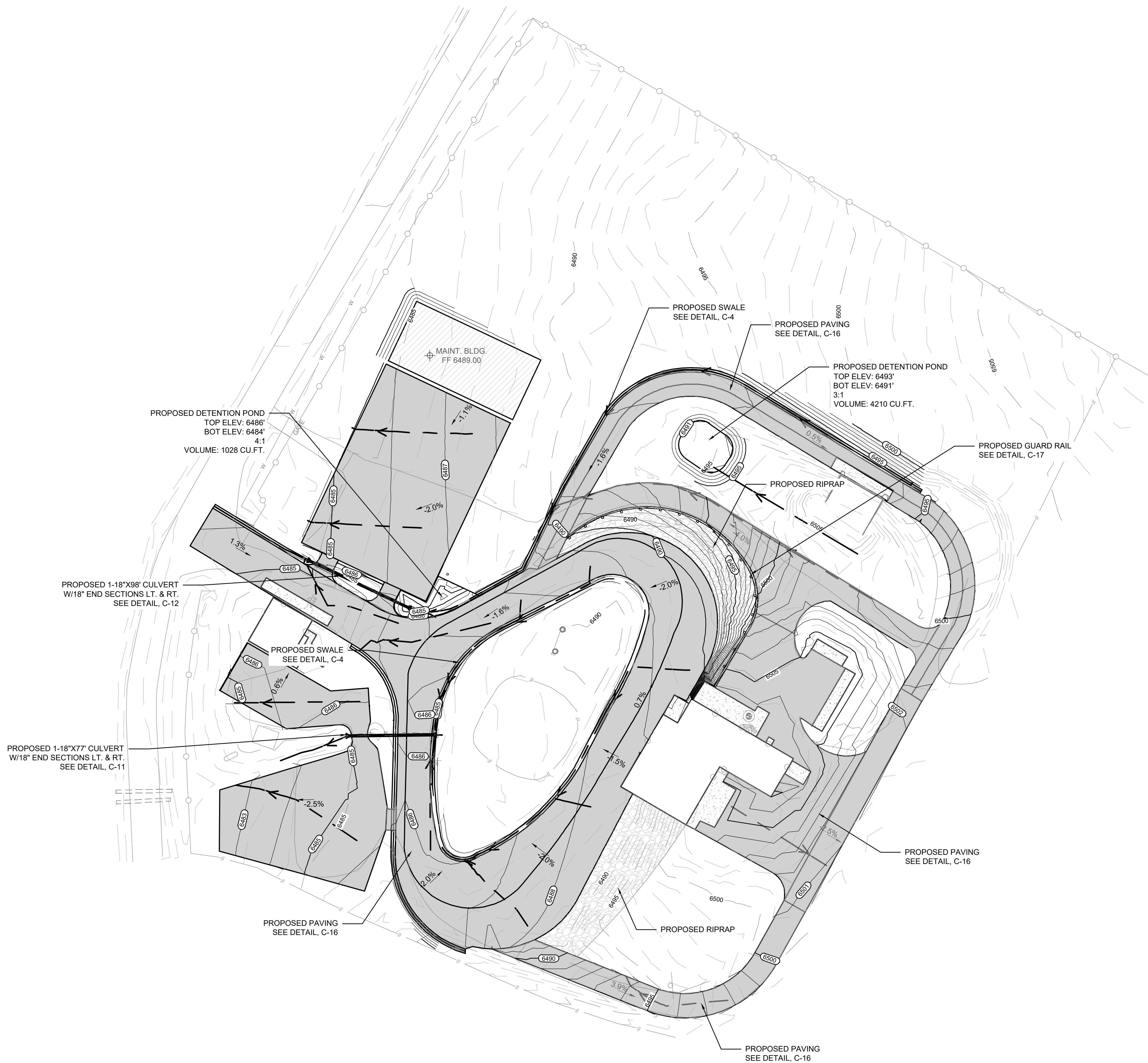
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			LAS VEGAS, NEW MEXICO	
DEMOLITION PLAN				
Description		By	CHK'd	
Rev #		Date		



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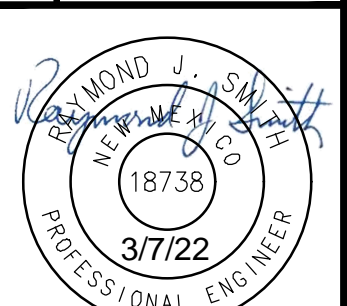
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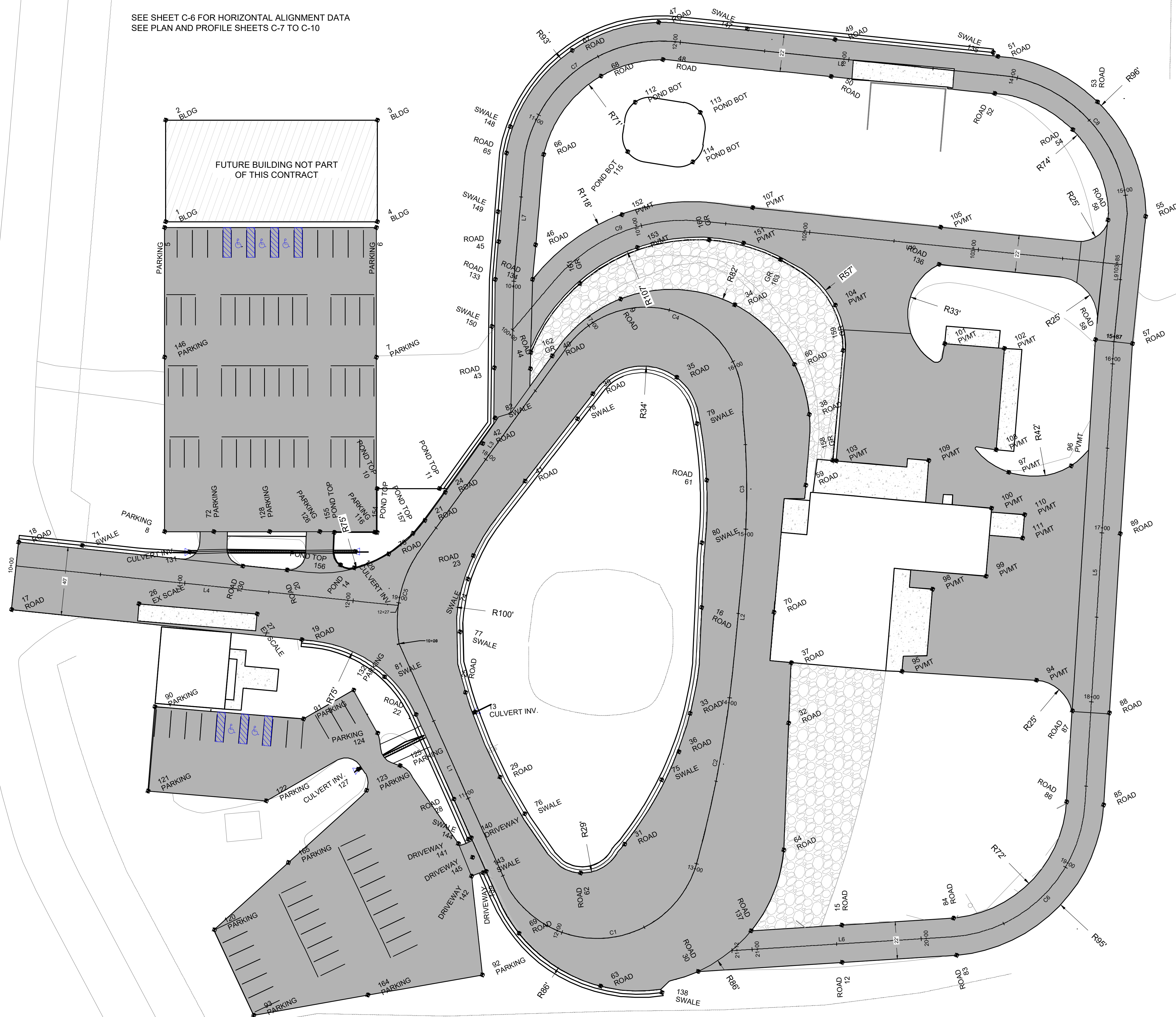
CITY OF LAS VEGAS

LAS VEGAS

TRANSFER STATION DRAINAGE DESIGN
LAS VEGAS, NEW MEXICO
GRADING & DRAINAGE PLAN



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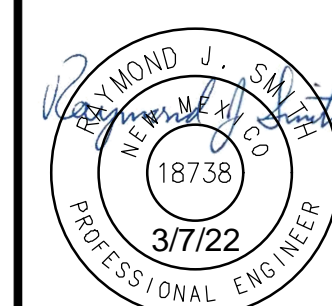


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OF LAS VEGAS

LAS VEGAS

TRANSFER STATION DRAINAGE DESIGN
LAS VEGAS, NEW MEXICO
HORIZONTAL CONTROL



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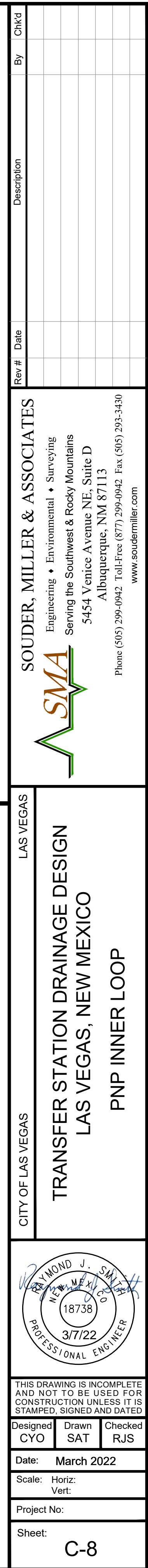
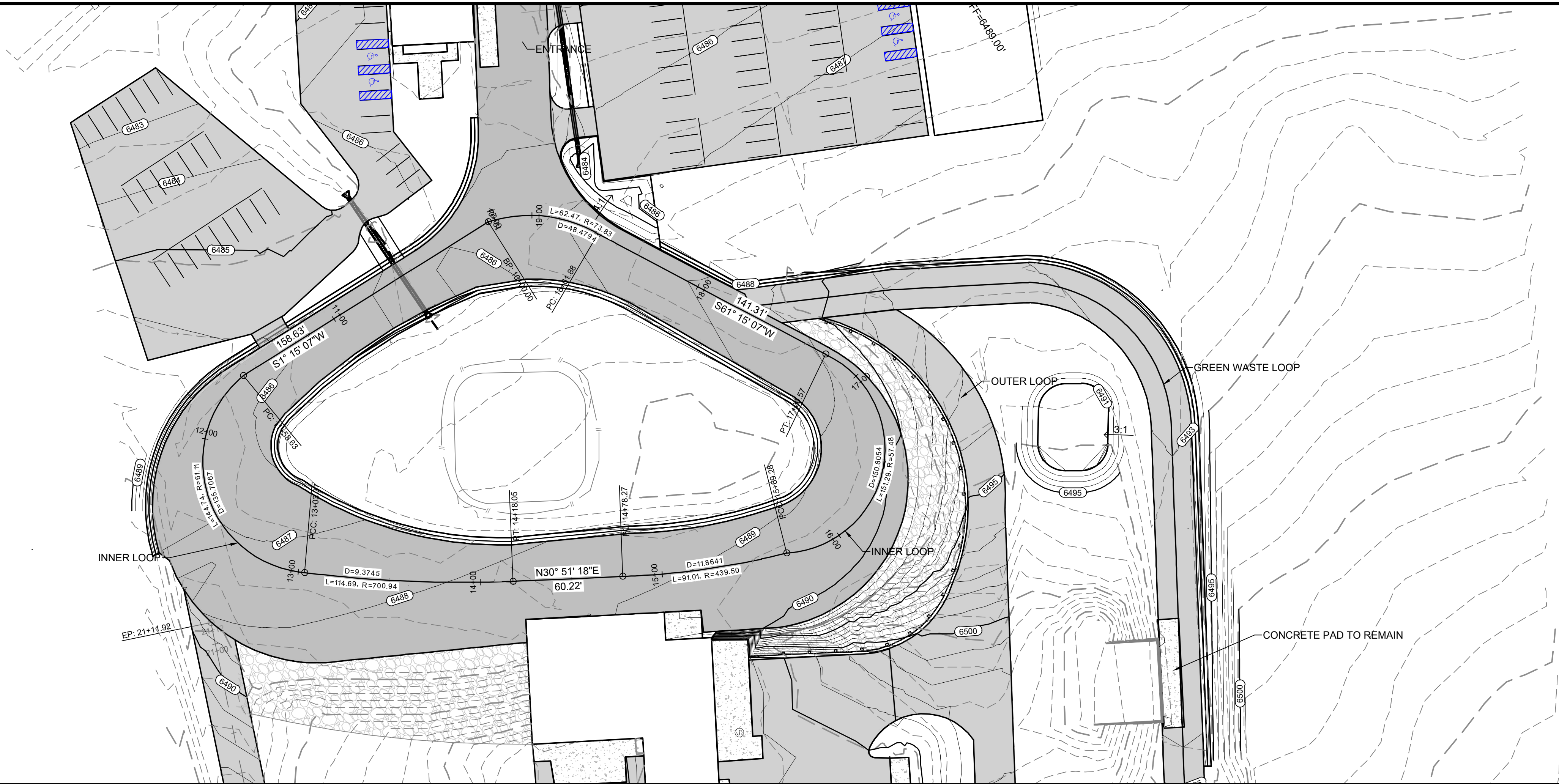
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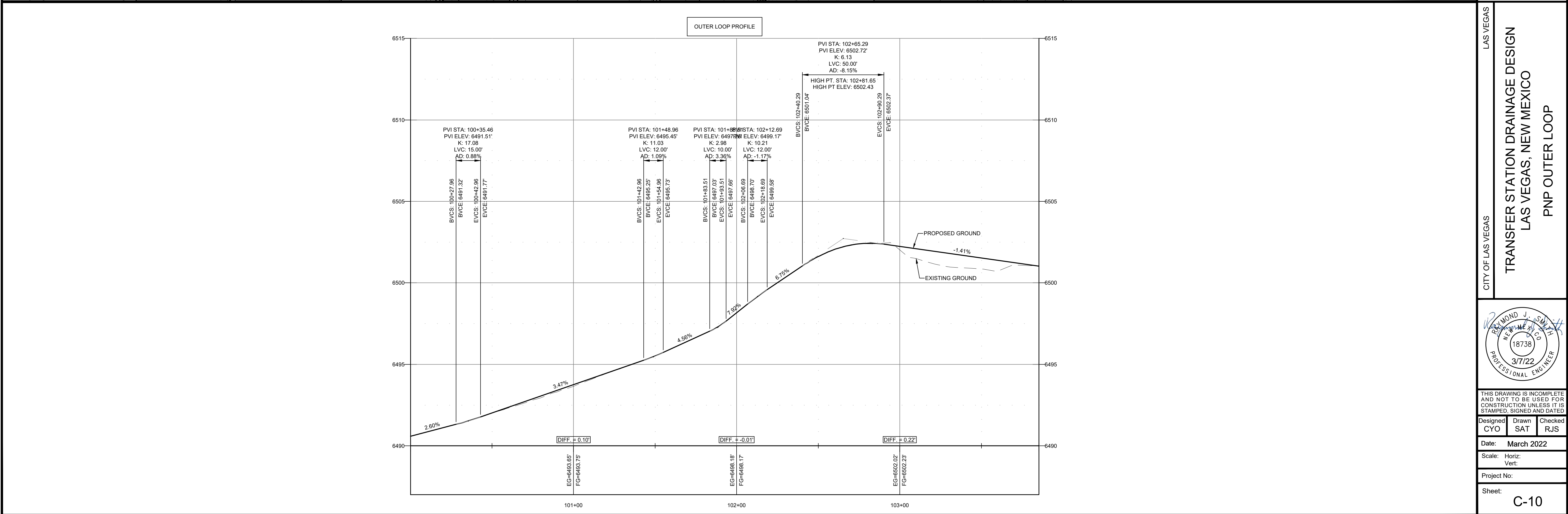
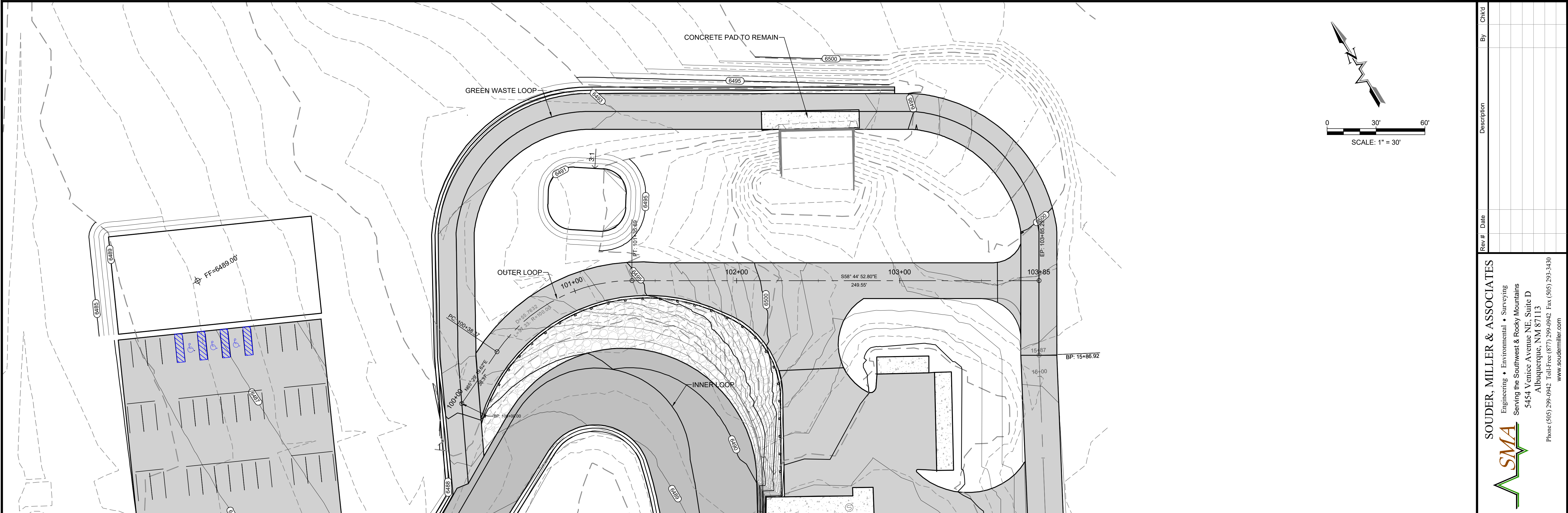
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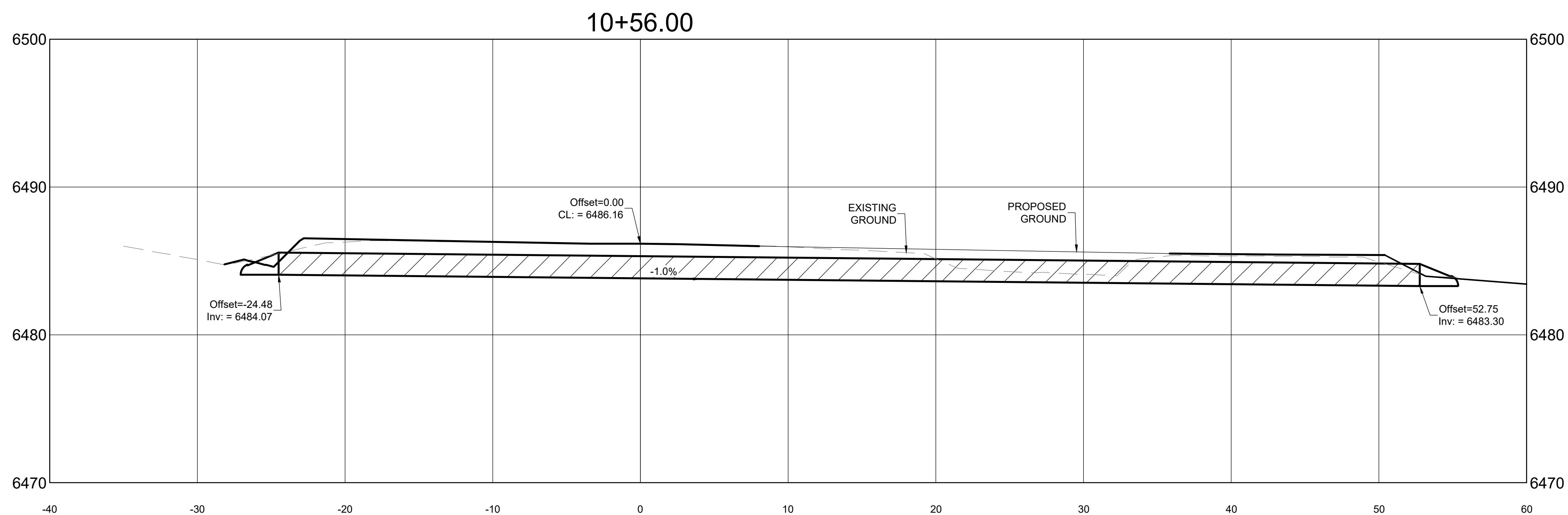
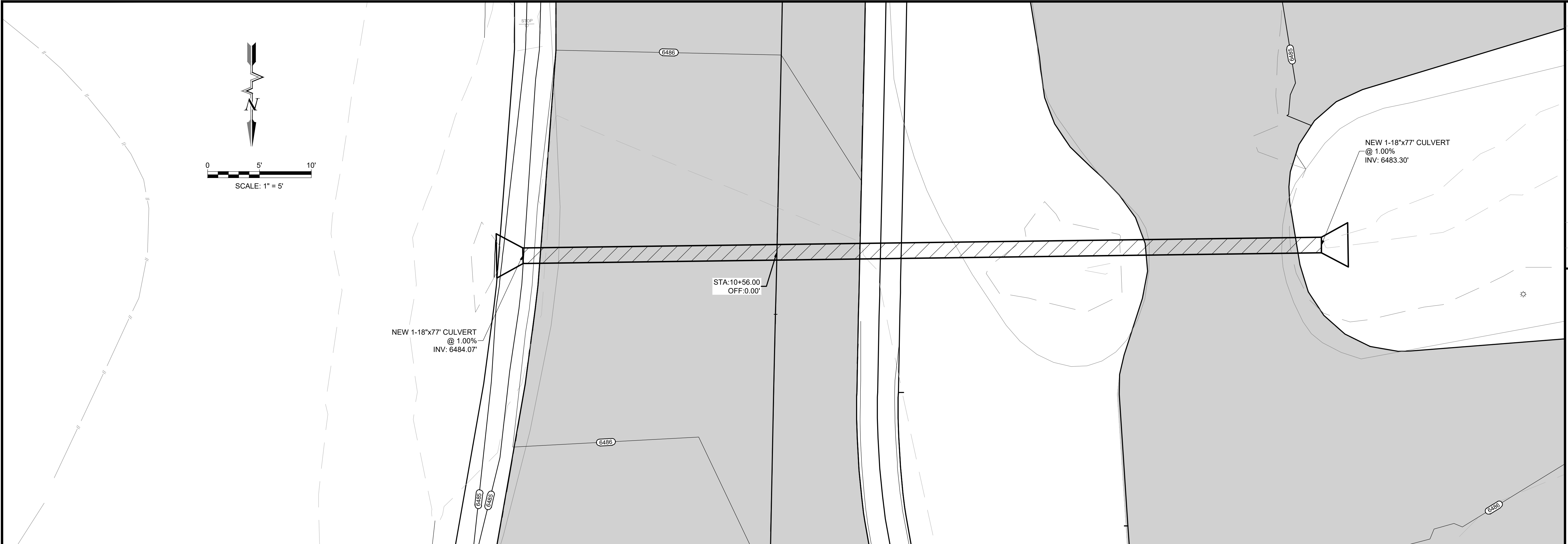
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STA. 10+56.00
REMOVE EXISTING 18" CULVERTS
BUILD 1-18"x77" CULVERT PIPE, SLOPE=1.00%
W/18" END SECTIONS LT & RT.



To Request a Line Locate Dial 811

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LAS VEGAS

TRANSFER STATION DRAINAGE DESIGN
LAS VEGAS, NEW MEXICO
INNER LOOP EMPLOYEE PARKING

18738
3/7/22
PROFESSIONAL ENGINEER

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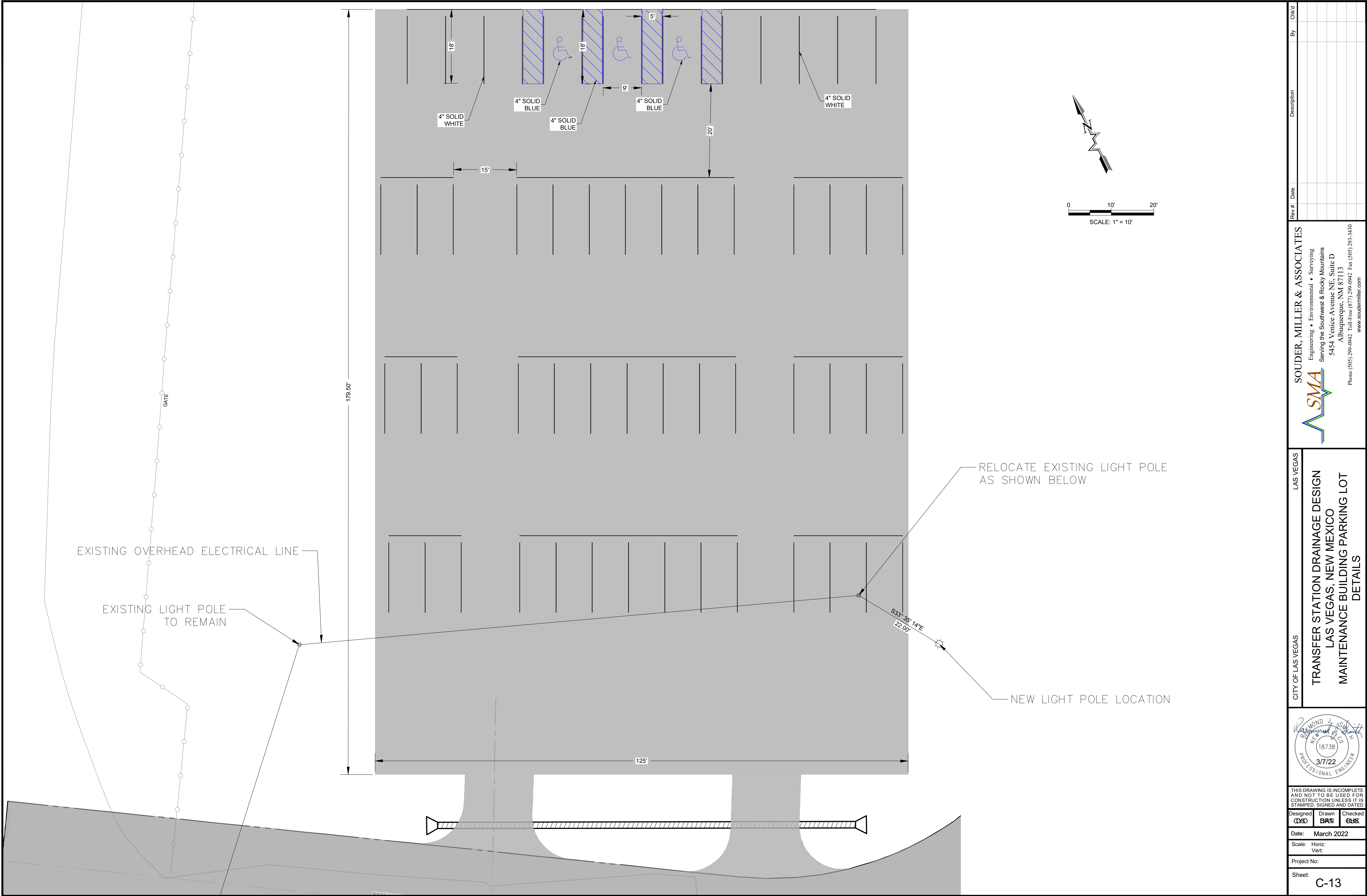
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CYO	SAT	RJS

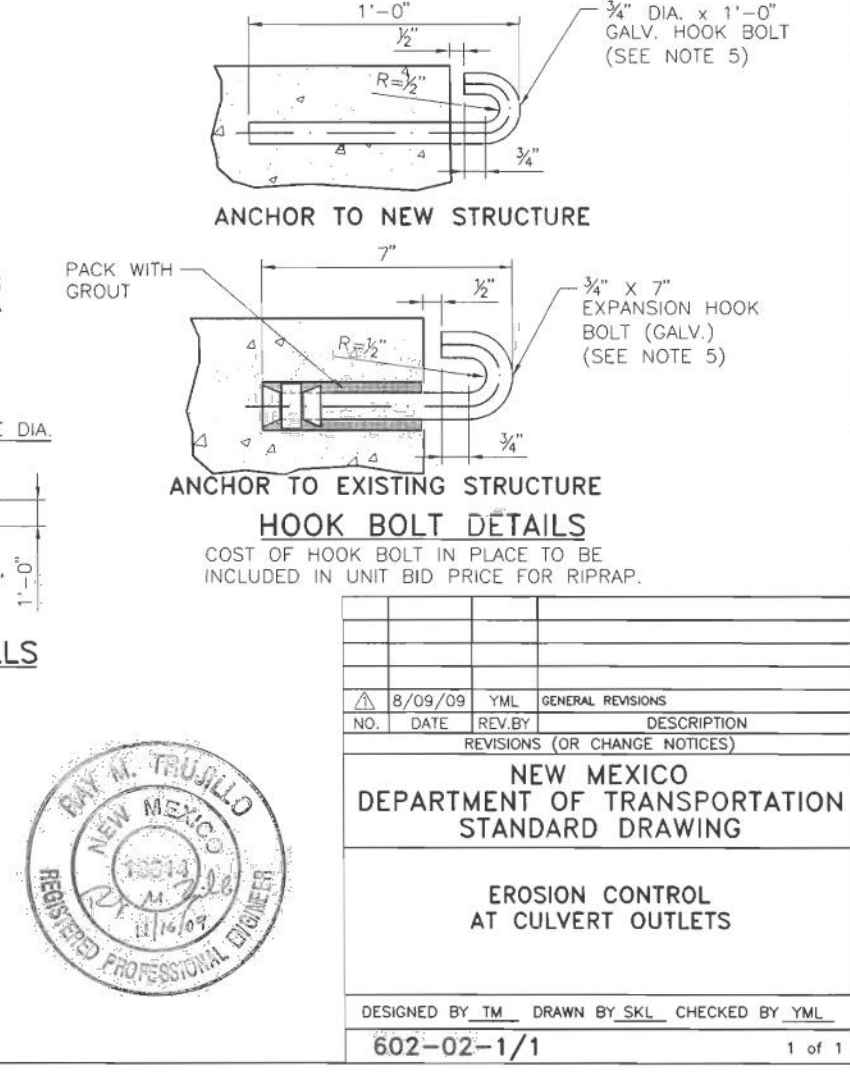
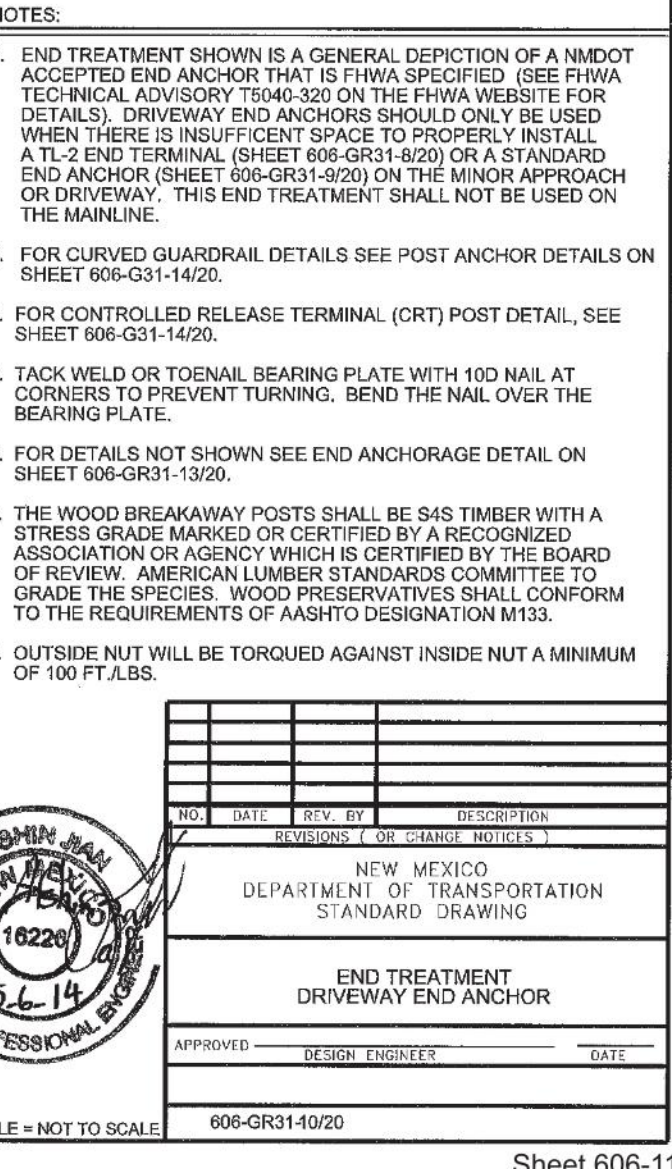
Date: March 2022

Scale: Horiz: Vert:

Project No:

Sheet: **C-11**





■ THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY STANDARDS.

NOTE:

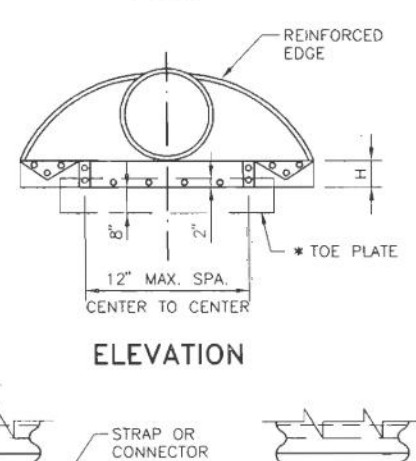
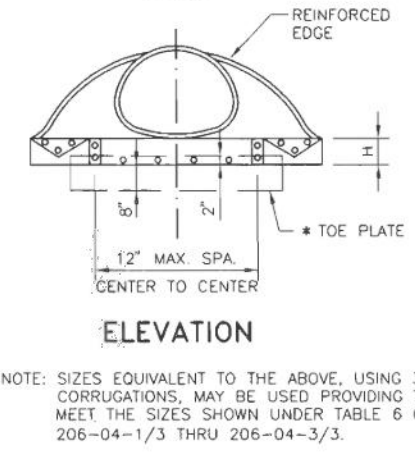
1. ALL 3/8" PEEBLES TO HAVE 12 GAUGE THICK SIDES AND 10 GAUGE THICK CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL BOARDS TO HAVE 1/4" SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED NUTS OR BOLTS.

△ 2. FOR 77" X 52" AND 83" X 57" SIZES, REINFORCED EDGED TO BE SUPPLEMENTED BY 1" X 2" X 1/4" GALVANIZED ANGLES. THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.

3. ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 77" X 52" AND 83" X 57" SIZES.

4. TOP PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS.

3" x 1" PLATE THAT THEY OF FERAL



72	12	18	39	12	87	126	1	1/31	3 PC.
78	12	18	48	12	87	132	1	1/31	3 PC.
84	12	18	48	12	87	138	1	1/31	3 PC.

* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CONTRACTOR INDUSTRY SIZES.

NOTE:

1. ALL 3 PEEBLES BODIES AND 12 GAUGE THICK SIDES AND 10 GAUGE CENTER PANELS WIDTH OF CENTER PANELS WILL BE GREATER THAN 208 INCHES. THE 12 GAUGE THICK SIDES AND 10 GAUGE BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 5/8" GALVANIZED NUTS OR BOLTS.

2. FOR 60" THICK 84" SQUARE REINFORCED EDGES TO BE SUPPLEMENTED WITH GALVANIZED STRENGTHEN ANGLES. THE ANGLES WILL BE 4" X 4" X 1/2" FOR 60" AND 6" X 6" X 1/2" DIAMETER AND 2 1/2" X 2 1/2" X 1/4" FOR 78" AND 84" DIAMETER. THE ANGLES TO BE ATTACHED BY 5/8" GALVANIZED NUTS AND BOLTS.

3. THE TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS.

M PIPE END SEC

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

CULVERT PIPE
END SECTIONS
(METAL)

DESIGNED BY _____ DRAWN BY SKL CHECKED BY TM/ML

570-02-1/2 1 of 2

